

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for the 698-746, 747-762)	WT Docket No. 06-150
and 777-792 MHz Bands)	
)	
Revision of the Commission's Rules to Ensure)	CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency)	
Calling Systems)	
)	
Section 68.4(a) of the Commission's Rules)	WT Docket No. 01-309
Governing Hearing Aid-Compatible Telephones)	
)	
Biennial Regulatory Review – Amendment of)	WT Docket No. 03-264
Parts 1, 22, 24, 27, and 90 to Streamline and)	
Harmonize Various Rules Affecting Wireless)	
Radio Services)	
)	
Former Nextel Communications, Inc.)	WT Docket No. 06-169
Upper 700 MHz Guard Band Licenses)	
And Revisions to Part 27 of the)	
Commission's Rules)	
)	
Implementing a Nationwide, Broadband,)	PS Docket No. 06-229
Interoperable Public Safety Network in)	
the 700 MHz Band)	
)	
Development of Operational, Technical and)	WT Docket No. 96-86
Spectrum Requirements for Meeting Federal,)	
State and Local Public Safety Communications)	
Requirements Through the Year 2010)	

**COMMENTS OF THE NATIONAL ASSOCIATION
OF TELECOMMUNICATIONS OFFICERS AND ADVISORS,
THE NATIONAL ASSOCIATION OF COUNTIES,
THE U.S. CONFERENCE OF MAYORS, AND
THE NATIONAL LEAGUE OF CITIES
IN RESPONSE TO THE FURTHER NOTICE OF PROPOSED RULEMAKING**

I. INTRODUCTION

The National Association of Telecommunications Officers and Advisors (“NATOA”), the National Association of Counties (“NACo”), the National League of Cities (“NLC”), and the US Conference of Mayors (“USCM”) submit these comments in response to the Further Notice of Proposed Rulemaking (“FNPRM”), released April 27, 2007, in the above-captioned proceeding.

NATOA’s membership includes local government officials and staff members from across the nation whose responsibility is to develop and administer cable franchising and telecommunications policy for the nation’s local governments.

NACo is the only national organization that represents county governments in the United States. It serves as a national advocate for counties; acts as a liaison with other levels of government; and provides legislative, research, technical and public affairs assistance to its members.

NLC is the nation’s oldest and largest organization devoted to strengthening and promoting cities as centers of opportunity, leadership and governance. NLC is a resource and advocate for more than 1,600 member cities and the 49 state municipal leagues, representing 19,000 cities and towns and more than 218 million Americans.

USCM is the official nonpartisan organization of the nation’s 1,183 U.S. cities with populations of 30,000 or more. Its mission is to promote effective national urban/suburban policy, strengthen federal-city relationships and ensure that federal policy meets urban needs.

Need for a National Broadband Policy

Before addressing some of the issues raised in the Commission's Further Notice of Proposed Rulemaking ("FNPRM"), we would like to once again express our support for achieving nationwide interoperability for our first responders. Local governments support the development of effective public safety information infrastructures. We must continue to have the ability to require that voice, video, and data communications networks provide sufficient spectrum and resources to meet local public safety needs. As representatives of local governments, we are in the unique position of knowing firsthand how important communications services are to our police, fire, and other emergency response personnel. We recognize how vital it is that our first responders – from any jurisdiction – have the ability to communicate with one another during times of man-made or natural disasters, such as 9/11 and Hurricane Katrina.

Local governments have an essential role to play in this discussion, especially when one considers that the overwhelming number of first responders are local employees. In fact, it is estimated that approximately 80 percent of all first responders work for local agencies. Without local government input, it is highly unlikely a national public safety broadband system will meet state, local and regional first responder needs.¹

If the Commission is intent on advancing public safety broadband deployment "consistent with a nationwide interoperability standard,"² it must do so together with all of its affected federal, state, regional and local partners. Such a plan should not be

¹ See NATOA Comments in PS Docket No. 06-229; WT Docket No. 96-86; WT Docket No. 07-16; and WT Docket No. 07-30.

² *In re the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, WT Docket No. 06-150, Report and Order and Further Notice of Proposed Rulemaking, para. 253 (rel. Apr. 27, 2007).

addressed in a vacuum; rather, the proposal must be treated as a critical part of a more, all-encompassing national broadband policy.

II. FNPRM

In the FNPRM, the Commission seeks comment on, among other things:

1) various band plan proposals for auctioning commercial spectrum in the 700 MHz band (including reconfiguration and location of spectrum blocks); 2) performance requirements; 3) redesignation of public safety wideband spectrum for broadband use; and 4) a proposal put forth by Frontline Wireless that requests the Commission to “alter the upper portion of the Upper 700 MHz Commercial Services Band to designate a 10 megahertz “E Block” for a commercial licensee and to impose specific conditions on that licensee requiring it to construct and operate a nationwide, interoperable broadband network for sharing with a national public safety licensee providing broadband service in the lower portion of the 700 MHz Public Safety spectrum.” While the majority of our comments will address the Frontline proposal, we do offer some comments regarding the band plan proposals, especially to the extent that those proposals may affect public safety communications.

Band Plan Proposals

With the enactment of the Digital Television Transition and Public Safety Act (“DTV Act”), public safety entities will gain access to an additional 24 MHz of spectrum in the 700 MHz band. The 700 MHz band, sometimes referred to as “beachfront spectrum,” is attractive to public safety entities in that it can function over long distances and penetrate structures. Indeed, the Commission “recognize[s] the unique communications needs of public safety entities and the instrumental role that spectrum in

the 700 MHz Band can play in meeting those communications needs.” Without getting into the specifics of the various band plan proposals, it is imperative that any plan not adversely affect the public safety spectrum.

A review of the various plans reveals a number of concerns that the Commission must consider and resolve – for the sake of America’s public safety – before adopting any of these proposals, including:

One. Any plan must not result in the loss of any new or existing public safety spectrum. There is currently no consensus as to whether our first responders have sufficient spectrum – even with the additional 24 MHz in the 700 MHz band – to solve the interoperability problems they face nationwide.³ Any “loss” should be defined broadly and must include any spectrum lost in the event a guard band is “necessary to protect shifted narrowband channels from public safety broadband operations.”⁴

Two. Any plan must not result in the relocation of any public safety spectrum that may be subject to blocking by existing Canadian television broadcasters or interference by others.

Three. Any plan must not impose any additional costs on public safety entities. Any relocation costs must be paid by the beneficiaries, such as D Block licensees, spectrum bidders, or others. Furthermore, any suggestion that relocation costs be paid from the \$1 billion Public Safety Interoperable Communications Grant Program must be rejected out of hand.

After reviewing the various band plans, and subject to our concerns expressed below concerning the Commission’s tentative conclusion on wideband, it appears that the

³ Comments of NATOA, PS Docket No. 06-229 and WT Docket No. 96-86 (February 26, 2007) at 11-12.

⁴ *In re the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, WT Docket No. 06-150, Report and Order and Further Notice of Proposed Rulemaking, para. 188 (rel. Apr. 27, 2007).

alternative proposal set forth by Access Spectrum/Pegasus is the plan that most closely addresses and alleviates our concerns outlined above. The Access Spectrum/Pegasus alternative proposal seeks to both maximize the commercial use of the 700 MHz spectrum, while improving public safety interoperability, especially along the Canadian border. Furthermore, it appears the plan does not result in any loss of public safety spectrum. And finally, the cost of the transition of public safety narrowband operations in the band would be paid by Access Spectrum/Pegasus.

Based on our current understanding of the plan, we believe the Access Spectrum/Pegasus proposal warrants due consideration by the Commission.

Flexibility and Wideband

Before addressing some of the specific aspects of Frontline's proposal, it is important to point out that the plan poses a threat to local governments' ability to make local and regional decisions concerning data technology deployment. We are especially concerned that the Commission has "tentatively concluded" that the current public safety data spectrum that has been identified for wideband use should be used to support only broadband operations consistent with a nationwide standard. We believe this is a flawed strategy.

We disagree with the Commission's assertion that "providing flexibility could hinder efforts to deploy a nationwide, interoperable broadband network by perpetrating a balkanization of public safety spectrum licenses, networks and technology deployment." Flexibility is critical. Public safety entities must continue to have the option to make local and regional decisions and the flexibility to choose the solution that best serves their unique requirements and budgets. Counties, cities, and towns must have the option to

implement a high speed data solution, whether that solution is wideband or broadband technology, a local/regional network, or a nationwide broadband network.

The Commission must keep open the option to permit local and regional decision-making, along with the option to choose the best solution for use of the public safety data spectrum, including a nationwide broadband network. For example, the use of a portion of the data spectrum could be decided by Regional Planning Committees, with the remainder utilized for a nationwide broadband network.

There are ways to meet the goals of interoperability other than mandating a single technology and limiting the spectrum only to a nationwide network. For example, wideband units could include an interface to broadband once the technology for a nationwide public safety broadband network is selected. This could be implemented through market requirements or FCC rules.

Further, it will take too long to build out a truly nationwide network of real value. Regional, interconnected networks make more sense, especially for the more rural, less-densely populated areas of the country. Realistically, areas of lower population density have no option to meet their mobile data needs in the 700 MHz band until a nationwide network was built throughout their jurisdictions. (See attached charts.)

When you look at this from a macro view across the country, it means that the proposed schedules in the FNPRM will cover about 58 to 62% of United States land mass once they achieve the build out goals. From a county by county view, it means that build out will most likely include only those counties with population densities of 10 or more people per square mile. Looking at the attached map, this leaves most of the counties in the western half of the country, except for the west coast and a few large urban counties,

and some counties in other parts of the country, questioning when – if ever – they will receive nationwide broadband network coverage.

The Commission should reconsider its tentative conclusion that only broadband applications consistent with a national interoperability standard should be deployed in the current wideband allocation of the 700 MHz band. It should not casually toss off the filed comments of those arguing that the “Commission should continue to allow public safety entities the flexibility to deploy either wideband or broadband applications,” especially when those filing such comments include the National Public Safety Telecommunications Council and the Association of Public-Safety Communications Officers.

Frontline’s Proposal

Frontline’s proposal has been receiving quite a bit of attention, as evident by this FNPRM. But it is important to separate the hype from what the plan can and should do to improve public safety broadband service and interoperability. Upon closer review, Frontline’s proposal is short on specifics and, like other similar proposals, the plan shortchanges our nation’s first responders. Accordingly, we file these comments with the Commission to register our opposition to Frontline’s proposal.

At it now stands, the public safety band includes a “mix of narrowband, wideband general use, wideband interoperability and wideband reserve channels.” However, as stated above, the Commission has tentatively concluded that the spectrum designated for wideband use be “reallocated” for broadband use only. Frontline’s proposal is premised, in part, upon the Commission adopting this “reallocation” of spectrum.

Frontline proposes that the Commission divide the current commercial D block, resulting in three 10 MHz commercial blocks: the current C block, an equal-sized D block, and a new, equal sized E block. The Commission could then “position[] that 12 MHz of broadband public safety [sic] at the bottom of the public safety allocation in the 700 MHz Band” adjacent to the E block and “assign[] this spectrum nationwide to a single national public safety broadband licensee.” The E Block licensee would be subject to a number of conditions, not the least of which is the construction and management of a national public safety broadband network. Such a network would operate as a “wireless broadband IP-based network,” “subject to the same survivability, throughput, security, and interoperability requirements specified by the public safety broadband rules.”⁵

Frontline asserts that its proposal addresses a number of problems seen as obstacles to achieving a nationwide public safety broadband network, including funding, sufficient spectrum capacity during emergencies, public safety agencies control over the network, choice in affordable equipment, and interoperability.

Funding

Frontline’s proposal would reportedly “enable[e] the construction – at no cost to taxpayers or public safety agencies – of a nationwide infrastructure that would support a 4G, interoperable, and secure public safety broadband network.” Since it has been estimated that it would cost billions of dollars⁶ to build such a network, the desire to take a bite of Frontline’s funding carrot is quite tempting. But upon closer review, it is quite

⁵ Comments of Frontline Wireless, LLC on *In re the Matter of Service Rules for the 698-746, 747-726 and 777-792 MHz Bands*, WT Docket No. 06-150, March 6, 2007 at 13.

⁶ Frontline Chairman Janice Obuchowski, in written testimony presented to the House Subcommittee on Telecommunications and the Internet, April 19, 2007, estimated that “more than \$10 billion” would be needed to construct such a network. http://energycommerce.house.gov/cmte_mtgs/110-ti-hrg.041907.Obuchowski-testimony.pdf

evident that Frontline’s proposal will cost both the taxpayers and public safety agencies money. The E Block licensee will be permitted to charge public safety agencies a “reasonable network management fee” for the use of the network. It is not unreasonable to assume that this “reasonable” fee would be based, in part, on recouping the costs of constructing the network. Furthermore, the E Block licensee would be permitted to make use of, and profit from, the public safety spectrum. And finally, it has been suggested that because of the various conditions the Frontline plan would impose on the E Block licensee, the auction price for the license may be adversely affected.

In addition, Frontline’s proposal is short on financing specifics. The plan merely proposes that the E Block spectrum be put to auction with certain conditions, including the requirement that the winning bidder “fund the construction of a common network infrastructure that would support, and be used by, both the public safety broadband network and the E Block licensee’s commercial network.” Janice Obuchowski, Chairman of Frontline Wireless, points out that the construction of such a network “requires huge capital investment to cover the large, upfront, fixed costs that will be required and that are beyond many communities’ means.” But in the same breath, she characterizes this “huge capital investment” as a “willing expense” of the national commercial licensee.

Frontline contends that the grant of a national license in the E Block would promote capital investment and will “lower the transaction costs of obtaining funding.”⁷ In addition, to help generate construction capital, Frontline proposes that the E Block

⁷ Comments of Frontline Wireless, LLC on *Service Rules for the 698-746, 747-726 and 777-792 MHz Bands*, WT Docket No. 06-150, March 6, 2007.

licensee would also have secondary, preemptible access to unused public safety spectrum “during times when it lies fallow.”

What is interesting about Frontline’s proposal, however, is that it apparently conflicts with its earlier comments. In addressing the possibility of funding network construction by “leasing excess capacity of the public safety broadband spectrum to commercial operators on a secondary, unconditionally preemptible basis,” the company stated that such use “will create insufficient incentive to commercial operators to underwrite the upfront billions of dollars it will cost to build a nationwide network. There is simply too much uncertainty and too little potential benefit in taking on such a large, capital investment in return for gaining access to an unpredictable and conditional amount of excess capacity on the public safety network.”⁸

The financial aspects of Frontline’s plan suffer from some of the very same problems we have previously pointed out in earlier filings, namely, it assumes that public safety entities nationwide would subscribe to the new network and be willing to give up their existing – and expensive – networks to pay for the use of an untested system. And it assumes that potential bidders for the E Block spectrum would want to invest in the construction and maintenance of such a network that would be subject to preemption during times of emergencies. (Curiously, Frontline’s proposal does not define “emergency;” instead, it leaves the definition subject to future negotiations between the E Block licensee and the national public safety licensee, whoever they may be.)

⁸ Comments of Frontline Wireless, LLC on *Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, PS Docket No. 06-229, February 26, 2007 at 96-86. While Frontline’s comments were concerned with whether a non-profit, national public safety licensee would have the expertise to raise sufficient capital to build a nationwide network, its comments regarding leasing of excess public safety spectrum would apparently remain pertinent to this discussion.

Public Safety Control Over the Network

One of the cornerstones of Frontline’s proposal is that the E Block licensee and the public safety community would negotiate an agreement regarding the shared use of the public safety network. Recognizing the benefits that such an agreement could provide, Frontline asserts that the parties “should be able promptly to reach an appropriate network sharing agreement.”

Frontline sets forth a number of requirements that would apply to the agreement, many of which give local authorities pause. One requirement states that the E Block licensee “shall consult with the public safety broadband licensee on design, construction, and operation of the shared network on the E Block and the public safety spectrum.” However, the mere duty to “consult” does nothing to protect the interests and goals of the public safety community. There is apparently no requirement that the E Block licensee adopt any recommendation of the public safety group. And considering the fact that the unique construction needs of the public safety network are expensive, it is highly probable that the public safety community’s voice will not be heard.

Another requirement states that “the E Block licensee would have access to public safety towers and rights of way to facilitate network buildout.” Obviously, any E Block licensee, or any provider for that matter, would have to comply with Section 253(c), which states:

Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such agreement.

But who will enforce these requirements? The Commission? Placing conditions on the agreement is simply not sufficient to protect the interests of the public safety broadband licensee.

However, Frontline believes it is not necessary to “impose any CALEA, E911, or similar obligations” on the E Block licensee because any retail providers using the E Block spectrum would “already be subject to those requirements.” But if that is the case, what is the harm in requiring these same conditions on the licensee? These are clearly public safety-related obligations and Frontline’s avoidance of them gives one pause.

Network Sharing Agreement

Like similar proposals, Frontline’s plan falls far short on details and fails to acknowledge the many problems and unknowns inherent in constructing and managing a new, nationwide broadband network. Indeed, when addressing the Network Sharing Agreement, Frontline is of the opinion that the Commission “not attempt to adopt detailed rules to implement its proposal but should reply on a requirement that the E Block licensee negotiate in good faith.” The Commission disagrees with this suggestion and has tentatively concluded that, in the event the Frontline proposal is adopted, it will have to impose conditions on both licensees to ensure that an agreement can be reached. “Successful negotiation of that agreement is a critical first step to achieving the benefits to public safety under the Frontline proposal.” The Commission suggests that it would delay granting the license to the successful E Block bidder until it files with the Commission a Network Sharing Agreement. “If the winning bidder and the national public safety licensee are unable to reach agreement, they would be required to

enter into binding arbitration to resolve outstanding issues.”⁹ Such uncertainty over the terms of an agreement and the delays this would entail are simply unacceptable to local governments.

Choice in Affordable Equipment

The E Block licensee would be required to “allow users to attach any device (or multiple devices) to the network.” However, this requirement is subject to the qualification that any device is “subject to security requirements and compliance with the published network interface specifications.” It is important that these requirements and specifications be drafted with input from public safety entities and that they do not - either intentionally or by accident – favor one manufacturer over another.

Interoperability

In an effort to increase interoperability and deployment, Frontline’s proposal would require the E Block licensee to “offer roaming to any provider with customers that use devices compatible with the open protocol interface of the E Block network.” Furthermore, all spectrum holdings of the E Block licensee would be subject to a nationwide roaming requirement to ensure there is no incentive to discriminate among customers.

While these requirements appear to have merit, the legality of imposing them on existing spectrum holdings may be questionable. Even if a potential bidder for the

⁹ Perhaps the Commission should consider the imposition of a 90-day negotiation deadline. In the event the terms of the agreement are not reached within that period, an Interim Agreement will be adopted based on the terms and conditions proposed by the public safety licensee. The E Block licensee would then be obligated to begin construction of the network, subject to future modifications in the event a final agreement is negotiated between the parties.

E Block agrees to such a condition, it is quite possible that requiring the licensee to operate an open network could have a negative pricing impact at auction, or limit the field of potential bidders.

Section 337

Finally, it is questionable how a private licensee can make use of public safety spectrum without violating section 337 of the Communications Act. The 12 MHz of public safety spectrum that Frontline wishes to exploit for commercial gain is allocated for “public safety services.” Such services are those whose sole or principal purpose is to protect the safety of life, health, or property, that are provided by state or local government entities, and that are not made commercially available to the public by the provider. Under this definition, what legal authority does the E Block licensee have to make use of this spectrum?

III. Conclusion

Public safety interoperability is a complex problem and many questions must be asked and answered before a final decision is made as to what sort of national public safety broadband network is best. Without a thorough understanding of all the complexities inherent in the problems of interoperability, it is too early – and much too rash – to be discussing the adoption of a one-size-fits-all public safety broadband system.

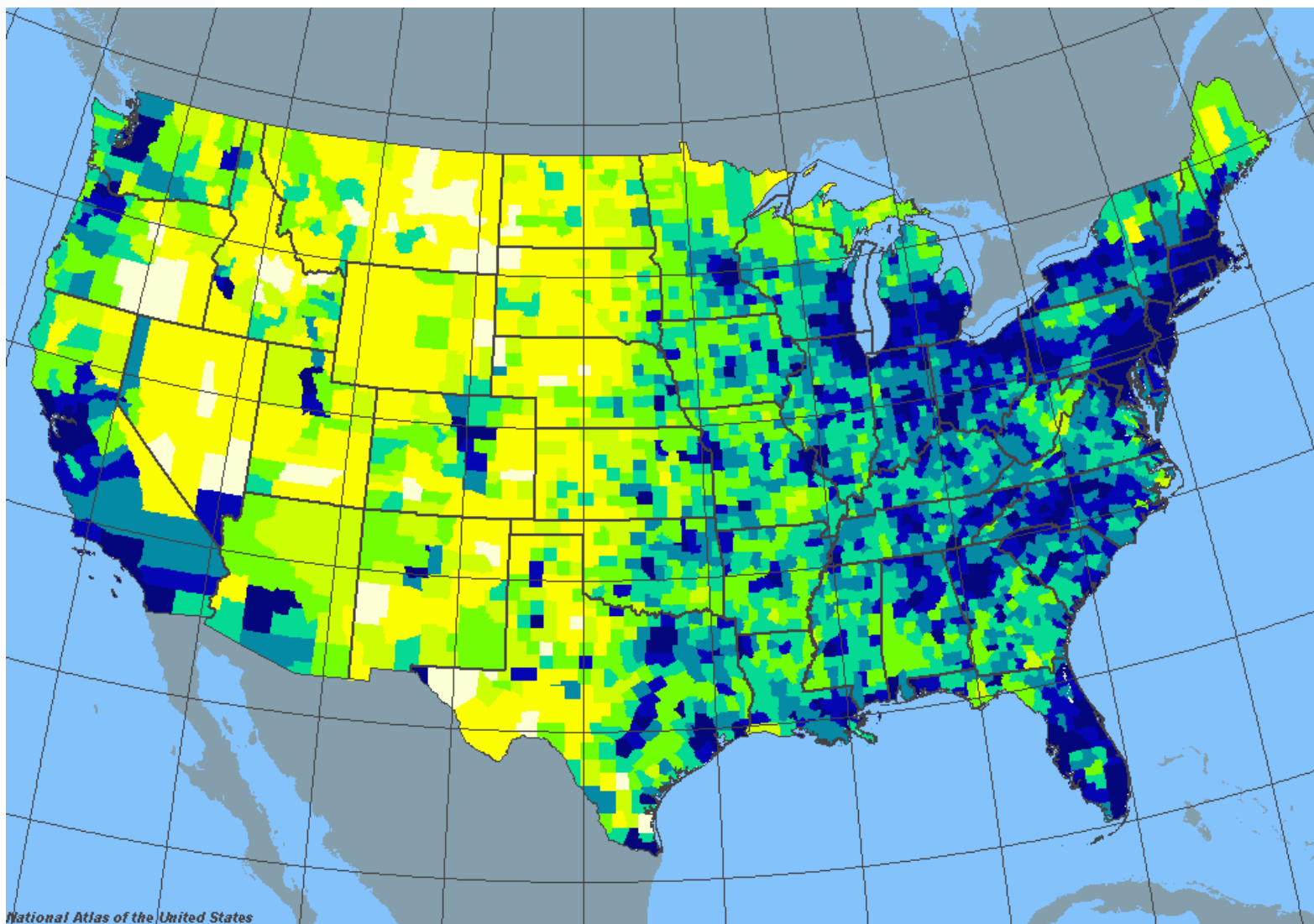
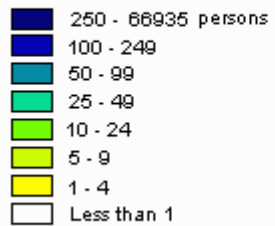
Local governments appreciate the opportunity to share their views with the Commission on this issue. As we work towards solving the problems of interoperability, we remain committed to our policy of ensuring that local governments continue to have

the voice, video, and data communications networks they require to meet local community needs, to ensure the public's safety and convenience, and provide important and critical communications services.

Respectfully submitted,

Libby Beaty
Stephen Traylor
NATOA
1800 Diagonal Road, Suite 495
Alexandria, VA 22314
(703) 519-8035
May 22, 2007

Population Density 2000
(persquare mile)



National Atlas of the United States

DEMOGRAPHICS & BUILD OUT PROJECTIONS (based on County Population Density 2000 Census Data)

US Without Alaska

Population Density per Sq. Mile	Land areas Square Miles	% of total	Cumulative Sq.Mi.	Cumulative %	Population Total	% of total	Cumulative Popl	Cumulative %
100-100,000	478,780	16.1%	478,780	16.1%	221,266,346	78.8%	221,266,346	78.8%
50-99	403,684	13.6%	882,463	29.8%	29,192,109	10.4%	250,458,455	89.2%
25-49	487,070	16.4%	1,369,534	46.2%	17,775,591	6.3%	268,234,046	95.5%
10-24	493,344	16.6%	1,862,877	62.8%	8,332,411	3.0%	276,566,457	98.5%
5-9	321,369	10.8%	2,184,246	73.7%	2,366,394	0.8%	278,932,851	99.3%
Less than 5	781,241	26.3%	2,965,487	100.0%	1,862,123	0.7%	280,794,974	100.0%
Total	2,965,487	100.0%			280,794,974	100.0%		

FCC Buildout (excl. govt land):	Cumulative Sq.Mi.	% of tot.land
25% of non-govt land area by 3 yrs.	572,896	19.3%
50% of non-govt land area by 5 yrs.	1,145,792	38.6%
75% of non-govt land area by 8 yrs	1,718,687	58.0%
Remaining 25% - no requirement	2,291,583	77.3%

Frontline Buildout proposal (incl. govt land):	Cumulative Popl	% of total
75% of population by 4 yrs.	210,596,231	75.0%
95% of population by 7 yrs.	266,755,225	95.0%
98% of population by 10 yrs	275,179,075	98.0%
Remaining 25% - no requirement	280,794,974	100.0%

* ASSUMPTIONS:

1. Assume that buildout means the entire county - not just the densest population center of county.
2. For very large area counties which have rural areas far beyond major population centers, may be unlikely that total area of county would be built out per schedule.
(e.g., San Bernardino CA, Clark NV, Miami-Dade FL)
3. Assumption is that Government land is in lower populated counties.

Other Statistics:

Calculation of Non-govt Land (non- AK)	% of tot.govt land	% of US land (w/o AK)
Total Government Land	1,020,779	
Total Alaska Government Land	346,875	34.0%
Total Govt Land w/o Alaska	673,904	66.0%
Total Non-Govt Land w/o Alaska	2,291,583	77.3%

Alaska Stats (not in above)	% of total US
Alaska sq.miles:	571,951
Alaska Population:	626,932

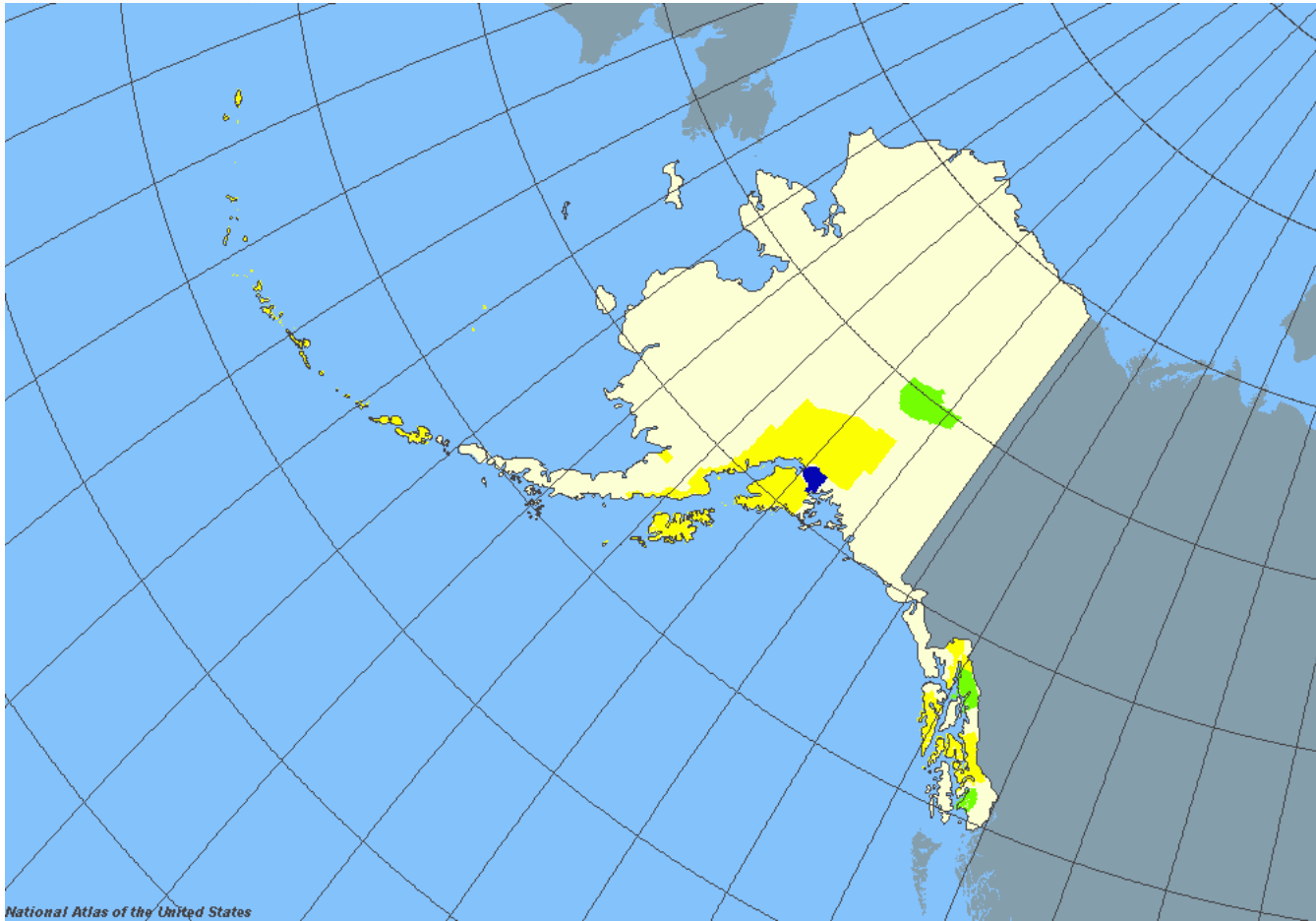
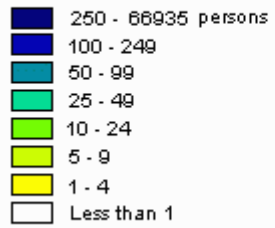
Approximate county build out *

- Black and blue areas of map would be built out
- Blue green plus about half of dark green would be built out
- Remaining half of dark green plus half of green would be built out
- Remaining half of green, all light green, yellow and light yellow has no build out plan *

Approximate county build out *

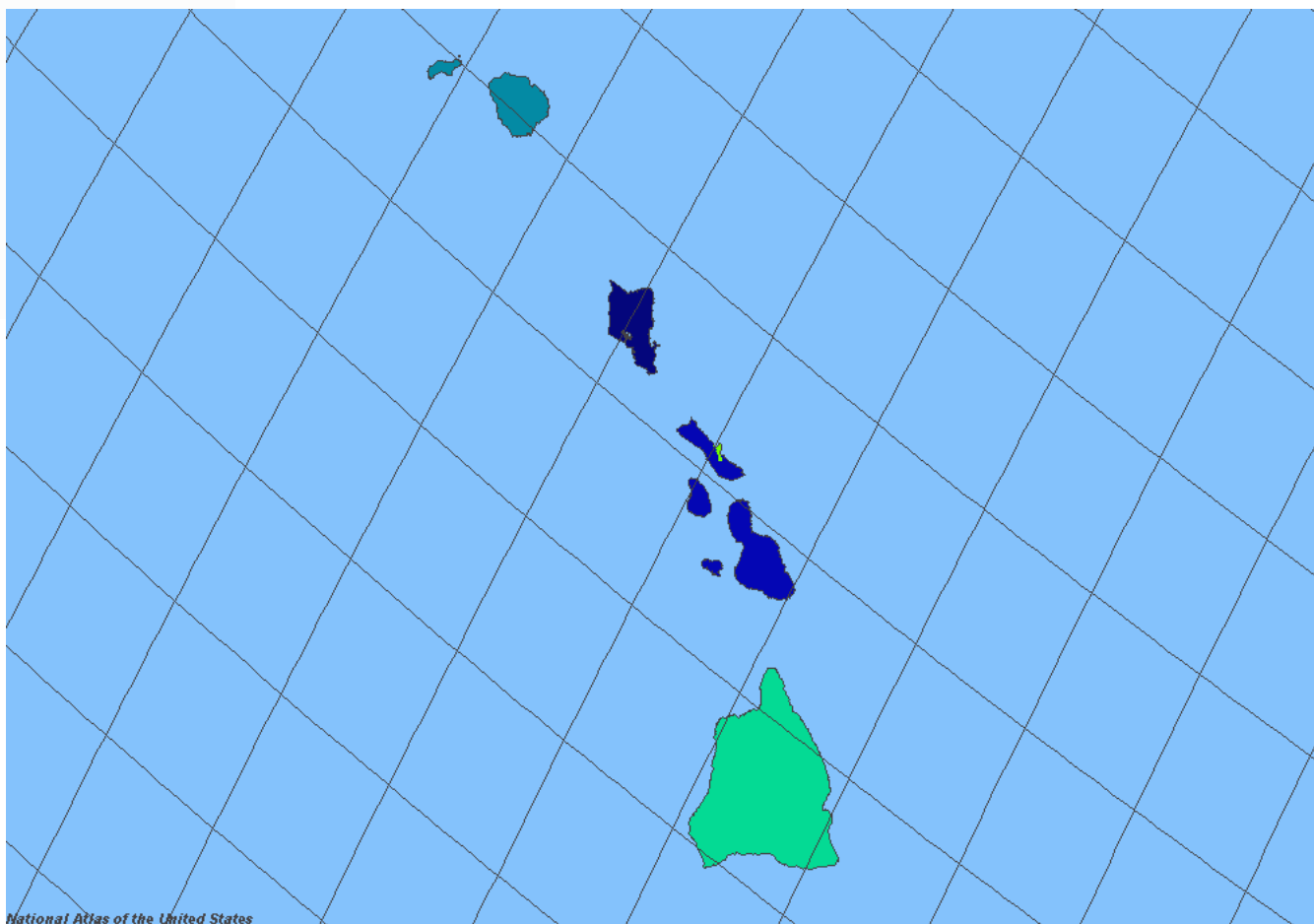
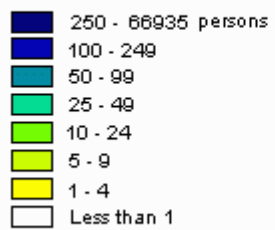
- All black plus most of blue areas of map would be built out
- Remaining blue green plus dark green would be built out
- Almost all green would be built out
- Remaining green, all light green, yellow and light yellow has no build out plan

Population Density 2000
(persquare mile)



National Atlas of the United States

Population Density 2000
(persquare mile)



National Atlas of the United States

Population Density 2000
(persquare mile)

